

**FOUR NEW SPECIES OF THE NEOTROPICAL
GENUS *THERANEIS* SPINOLA
(HEMIPTERA: HETEROPTERA: LARGIDAE)**

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Abstract.—Four new species of *Theraneis* Spinola, collected in Venezuela, Brazil and Peru are described and illustrated. *Theraneis* is reported for the first time from Venezuela. The distribution pattern of the silvery pubescence as well as the color of the hemelytra are shown to be good characters to distinguish the species. A key for the separation of most of the species is included.

In the general catalogue of the Hemiptera, Fascicle III (Pyrrhocoridae) Hussey and Sherman (1929) recognized ten species within *Theraneis* Spinola (*T. amabilis* Bredin, *T. constricta* Stål, *T. dissimilis* Distant, *T. ferruginea* Mayr, *T. isobel* Hussey, *T. lurida* Distant, *T. oleosa* Distant, *T. pulchra* Distant, *T. spinosa* Distant and *T. vittata* Spinola). Schmidt (1931) described *T. vaga* from Brazil, *T. montivaga* and *T. amabilis* var. *taeniata* from Colombia, and gave new localities for *T. amabilis*, *T. constricta* and *T. pulchra*. In a recent paper Van Doesburg (1966) described *T. surinamensis* from Suriname.

The type material of the following species was examined; the codens for specimen depositories is given parenthetically: *T. dissimilis* (BMNH), *T. lurida* (BMNH), *T. montivaga* (DEI), *T. oleosa* (BMNH), *T. pulchra* (BMNH), *T. spinosa* (BMNH), *T. surinamensis* (RNHL) and *T. vaga* (DEI). Three species: *T. constricta*, *T. ferruginea* and *T. isobel* were not located and therefore not examined. In each case only the original description was consulted.

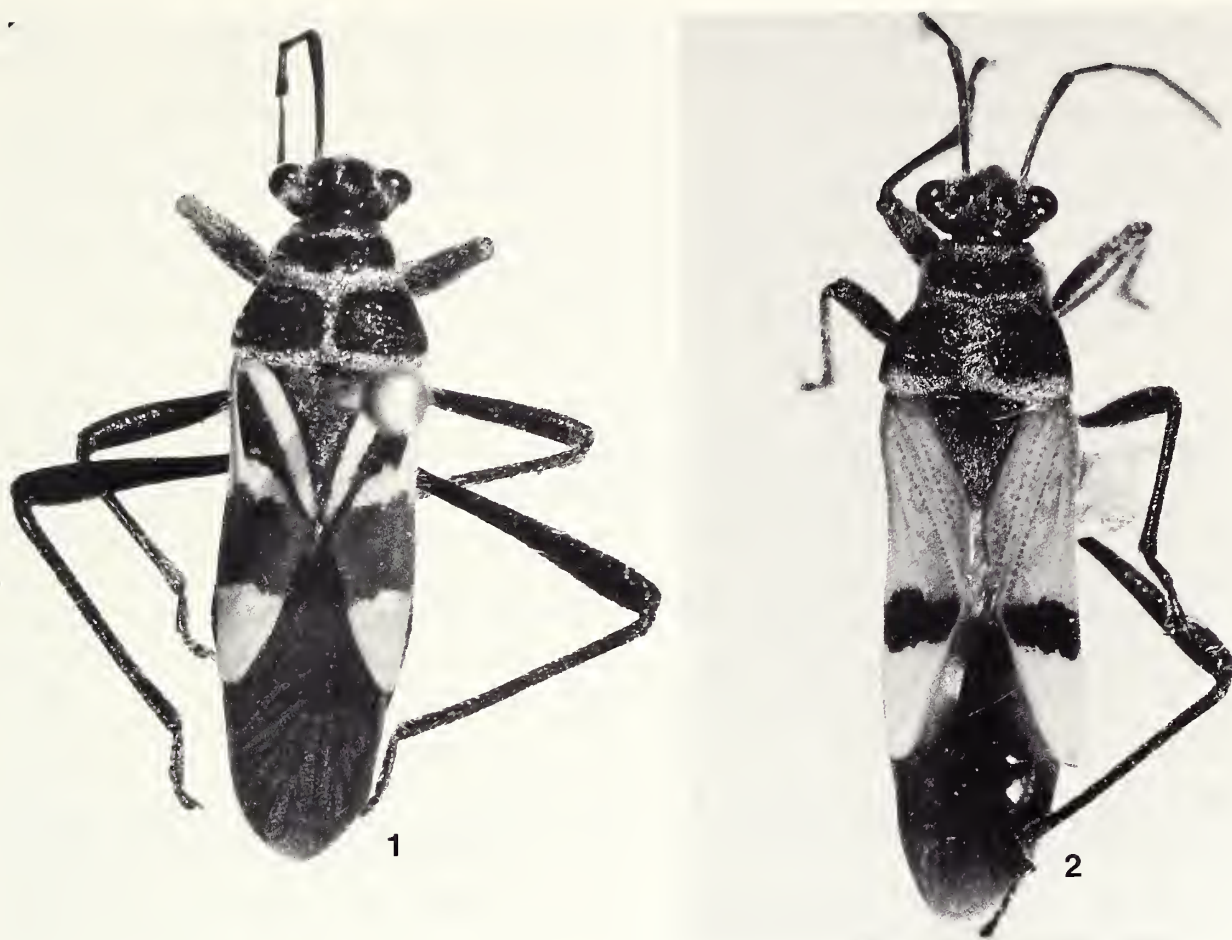
Based on specimens recently examined by the author, four new species are described, therefore *Theraneis* consists of 17 known species and one variety.

The following abbreviations are used in the text: British Museum (Natural History), England. (BMNH); Deutsches Entomologisches Institut, Germany (DEI); Instituto de Biología de la Universidad Nacional Autónoma de México (IBUNAM); Muséum National d'Histoire Naturelle, Paris, France (MNP); Rijksmuseum Van Natuurlijke Historie, Leiden, Netherlands (RNHL); Universidad Central de Venezuela, Escuela de Agronomía, Maracay (UCV); United States National Museum, Smithsonian Institution, Washington, D.C. (USNM).

All measurements are in millimeters.

***Theraneis neotropicalis*, new species
(Fig. 1)**

Female. Description. Head. Length: 1.20; width across eyes: 1.96; length antennal segments: I, 1.88; II, 1.00; III, 0.80; IV, 1.48; shiny black, with large semi-pedunculate bulging eyes and clothed with silvery pubescence, intermixed with erect hairs; an-



Figs. 1, 2. 1. *Theraneis neotropicalis*, new species. 2. *Theraneis multicoloratus*, new species.

tenal segments I and II shiny black, III and IV reddish black; labium black, reaching anterior margin of metasternum.

Thorax. Pronotum. Anterior lobe: length: 0.88; width: 1.80. *Posterior lobe:* length: 1.16; width: 2.72. Trapezoidal-shaped, shorter than wide, with rounded edges; shiny black, posterior corners creamy yellow and with the following areas covered with adpressed silvery pubescence: anterior margin including collar, anterior half of anterolateral border, wide transverse fascia posteriad to callus, posterior margin (except tip of humeral angle) and a narrow longitudinal median band which bisects posterior lobe; disc with deep and coarse punctation; humeral angles rounded and not exposed; sides and underside of thorax densely clothed with adpressed silvery hairs, except for following shiny black areas: anterior and middle acetabule, an oval or irregular median spot on propleural, mesopleural and metapleural regions, superior margin of propleural, posterior propleural and mesopleural flanks, anterior metapleural flank and two irregular spots laterally to mesosternum; posterior margin of metathorax creamy yellow; legs shiny black, covered with fine adpressed silvery hairs, intermingled with long white setae; tarsal segments reddish brown; metapleural scent-gland orifices with orange black peritreme. *Scutellum.* Length: 1.40; width: 1.32; slightly longer than wide; dull black; anterior part slightly depressed, irregularly punctate and provided with short dense pubescence, intermixed with some erect hairs. *Hemelytra.* Clavus creamy yellow with anal border, claval commissure and claval suture black; corium tricolored, anterior half creamy yellow, except for an elongate triangular black

area close to clavus, followed by a wide orange transverse fascia and a creamy yellow area at posterior end; membrane dark brown.

Abdomen. Connexivum shiny black with some erect hairs; dorsal segments I to VI yellow, with irregular black spots medially; dorsal segments VII to IX shiny black; underside black and densely covered with adpressed silvery pubescence, intermixed with erect hairs; lateral portions of third sternite, posterior margin of seventh sternite and genital plates shiny black. Total body length 9.75.

Holotype. Female. BRAZIL: GOYAZ: Jatahy, 1900, H. Donckier. Deposited in MNP.

Discussion. Recognized by its large size, contrasting coloration of the hemelytra, dorsal abdominal segments I to VI yellowish as well as the pattern distribution of the dorsal and ventral silvery pubescence. This is the only species in the genus for which the color of the posterior margin of metathorax is creamy yellow, the margin of the other species is black.

Etymology. Named for its occurrence in the Neotropical Region.

***Theraneis multicoloratus*, new species**

(Fig. 2)

Male. Description. Head. Length: 0.92; width across eyes: 1.64; length antennal segments: I, 1.52; II, 0.80; III, 0.56; IV, 1.36; black, with large semi-pedunculate bulging eyes and clothed with silvery pubescence, intermixed with erect hairs; antennal segments I to III black, IV dark orange chestnut brown; labium black, reaching mesocoxae.

Thorax. Pronotum. Anterior lobe: length: 0.72; width: 1.48. *Posterior lobe:* length: 1.00; width: 2.16. Trapezoidal-shaped, shorter than wide, with fairly rounded edges; black, except for posterior corners which are reddish-orange; surface densely set with silvery, adpressed hairs, except the following shiny black areas with only few erect hairs: transverse fascia along anterior lobe and most of posterior lobe (posterior margin and median longitudinal stripe with silvery pubescence); disc with deep and coarse punctation; humeral angles rounded and not exposed; sides and underside of thorax densely clothed with adpressed silvery hairs, except posterior propleural and anterior mesopleural flanks, plus two irregular spots laterally to mesosternum which are shiny black with only some long setae; legs shiny black, covered with fine, adpressed silvery hairs, intermingled with long white setae; tarsal segments black and shiny reddish-brown; metapleural scent-gland orifices with black peritreme. *Scutellum.* Length: 1.28; width: 1.00; slightly longer than wide, dull black, with dark orange chestnut brown apex; anterior part slightly depressed, irregularly punctate and provided with short silvery pubescence intermixed with some erect hairs. *Hemelytra.* Clavus pale yellowish orange; corium tricolored, anterior half pale yellowish orange, followed by a black irregular transverse fascia located beyond claval commissure and followed by pale yellow apical margin and apical angle; membrane dark brown with a narrow dirty white border, and basal angle and adjacent area to apical border of corium dirty yellowish ochre.

Abdomen. Connexivum and venter black, densely covered with adpressed silvery pubescence, intermixed with erect hairs; dorsal segments shiny black; seventh sternite shiny black with erect hairs and with only pleural margin densely covered with silvery

pubescence. *Pygophore*. Postero-ventral border with an open, triangular, shallow notch and with lateral borders thickened. Total body length: 8.58.

Female. Head. Length: 1.04; width across eyes: 1.76; length antennal segments: I, 1.76; II, 0.80; III, 0.68; IV, 1.40. *Pronotum. Anterior lobe*: length: 0.72; width: 1.64. *Posterior lobe*: length: 1.08; width: 2.40. *Scutellum*. Length: 1.44; width: 1.16. Total body length: 9.57. Markings and coloration similar to male.

Holotype. Male. BRAZIL: PARA: Rio Iripí Camp. (52°40'W, 3°50'S) Altamira (ca. 100 km S), 17–18. X. 1986, P. Spangler & O. Flint. Deposited in USNM.

Paratype. Female. Same data. Deposited in IBUNAM.

Discussion. This beautiful species is recognized by the attractive coloration of its hemelytra which alternates a pale yellowish orange region, a black transverse fascia and a pale yellow area. The pattern of pubescence is diagnostic where just a few spots show a shiny black coloration with only few scattered hairs. The characteristic spots are: a transverse fascia along the anterior lobe and most of the posterior lobe of the pronotum; the posterior propleural and the anterior mesopleural flanks of the thorax, plus two lateral areas on the mesosternum and most of the seventh abdominal sternite.

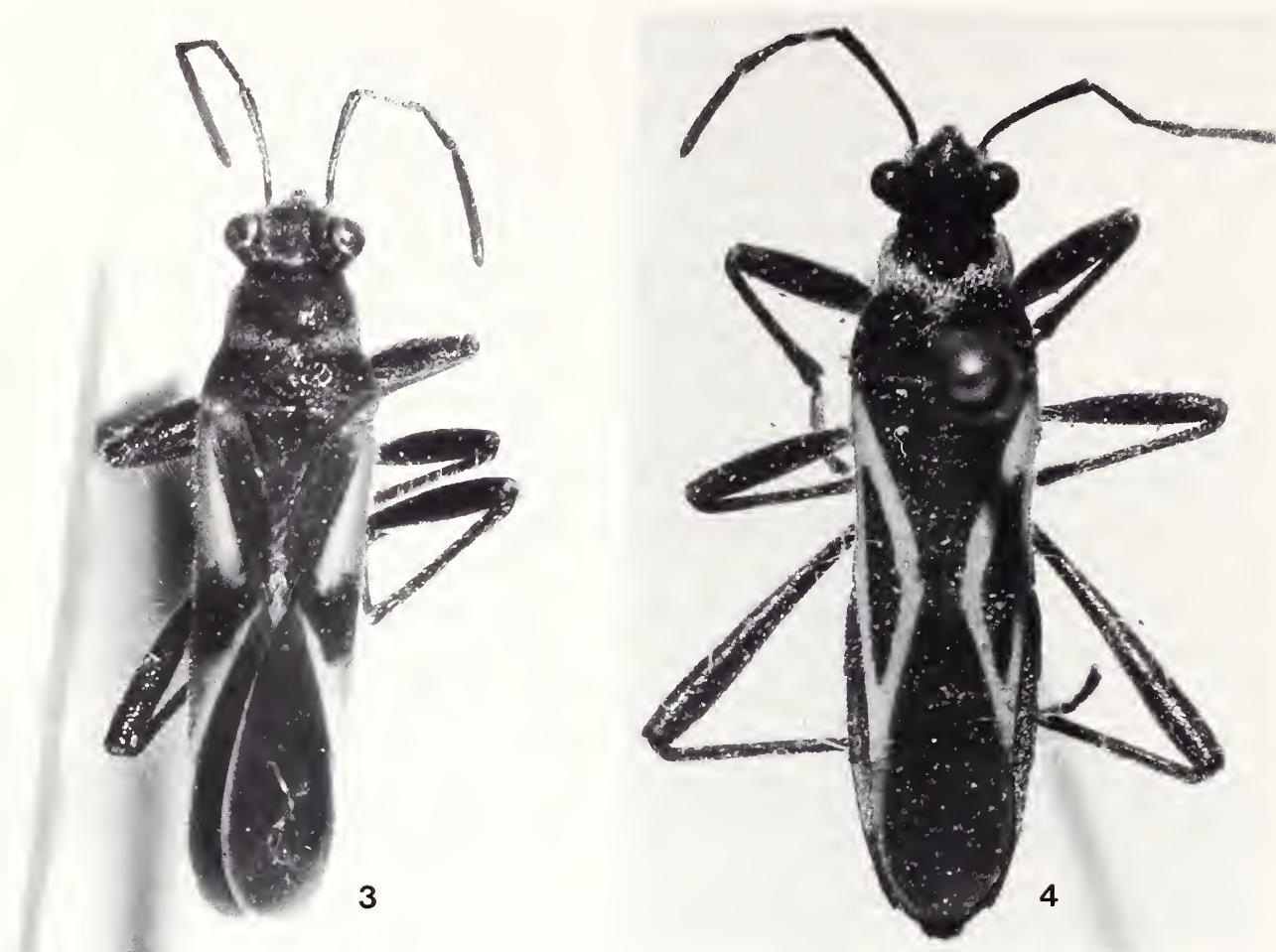
Like *T. surinamensis* Van Doesburg the clavus is unicolorous, the antennal segment II black, the humeral angles inermis and the pronotum black with the humeral angles red, yellow or orange. In *T. multicoloratus*, new species, the corium is tricolored which is the most distinctive feature, whilst in *T. surinamensis* it is completely yellow or orange.

Etymology. Named for the attractive coloration of the corium.

***Theraneis araguaensis*, new species**
(Fig. 3)

Male. Description. Head. Length: 0.96; width across eyes: 1.56; length antennal segments: I, 1.40; II, 0.76; III, 0.56; IV, 1.40; shiny black, with large semi-pedunculate bulging eyes and clothed with scattered silvery pubescence, intermixed with erect hairs; antennal segments I and II shiny black, III shiny reddish-black and IV orange red chestnut-brown; labium black, reaching the mesocoxae.

Thorax. Pronotum. Anterior lobe: length: 0.78; width: 1.48. *Posterior lobe*: length: 0.76; width: 1.92. Trapezoidal-shaped, slightly shorter than wide, with fairly rounded edges; black, posterior corners reddish-orange; posterior sulcus of callus densely set with silvery adpressed hairs; disc with deep and coarse punctation; humeral angles rounded and not exposed; sides and underside of thorax densely clothed with adpressed silvery hairs, except posterior propleural and two irregular spots, laterally to mesosternum which are shiny black with only some long setae; legs shiny black, covered with fine adpressed silvery hairs, intermingled with long white setae; apical tibiae and tarsal segments shiny reddish-black; metapleural scent-gland orifices with black peritreme. *Scutellum*. Length: 1.00; width: 0.92; slightly longer than wide; dull black; anterior part slightly depressed, irregularly punctate and provided with some erect hairs. *Hemelytra*. Clavus black, basal third and anal border reddish-orange; corium tricolored, exocorium including costal margin reddish-orange, endocorium and apical margin creamy yellow and most of the area bordering claval suture and subdiscoidal spot located on middle third near apical margin black or dark brown; membrane dark brown with a complete wide whitish border.



Figs. 3, 4. 3. *Theraneis araguaensis*, new species. 4. *Theraneis elongatus*, new species.

Abdomen. Shiny black with some erect hairs; posterior margins of sternites III to VI densely covered with adpressed silvery pubescence. *Pygophore.* Postero-ventral border U-shaped and thickened. Total body length: 8.28.

Holotype. Male. VENEZUELA: ARAGUA: Rancho Grande, 5.VI. 1958, F. Fernández Yepez. Deposited in UCV.

Discussion. This is the first time the genus *Theraneis* is reported from Venezuela. *T. araguaensis*, new species, is a very distinct species, not only in having the coloration of the hemelytra completely different from that found in the other species, but also the distribution of the silvery adpressed pubescence and the shape of the postero-ventral border of pygophore.

Theraneis pulchra Distant is closely related, resembling *T. araguaensis* in size, shape of humeral angles and general habitus. In *T. pulchra* the clavus and corium are entirely light yellowish-orange or reddish-orange and antennal segment II yellow. In *T. araguaensis* the antennal segments II are black.

Etymology. Named for the type locality, Aragua.

***Theraneis elongatus*, new species**

(Fig. 4)

Male. Description. Head. Length: 1.08; width across eyes: 1.76; length antennal segments: I, 2.00; II, 0.96; III, 0.68; IV, 1.64; black, with large semi-pedunculate bulging eyes and clothed with silvery adpressed pubescence, intermixed with erect

hairs; antennal segments I and II dark reddish-black, III dark orange chestnut-brown and IV little lighter than III; labium black, reaching the mesocoxae.

Thorax. Pronotum. Anterior lobe: length: 0.80; width: 1.60. *Posterior lobe:* length: 0.96; width: 2.16. Trapezoidal-shaped, black, slightly shorter than wide, with fairly straight edges; posterior sulcus of callus densely set with silvery, adpressed hairs; pubescence extending posteriorly into a median longitudinal stripe that reaches the posterior border; disc with deep and coarse punctation; humeral angles not exposed and with a small apical tooth; sides and underside of thorax densely clothed with adpressed silvery hairs, except posterior propleural, posterior mesopleural and anterior metapleural flanks, plus two irregular spots laterally to mesosternum which are shiny black with only some long setae; legs shiny black covered with fine, adpressed silvery hairs, intermingled with long white setae; tarsal segments dark orange reddish-brown; metapleural scent-gland orifices with black peritreme. *Scutellum.* Length: 0.88; width: 0.80; slightly longer than wide, dull black, apex dark reddish-brown; anterior part slightly depressed, irregularly punctate and provided with some erect hairs. *Hemelytra.* Clavus dull black; corium creamy yellow with a longitudinal median black stripe; membrane pale brown, with a wide external whitish border.

Abdomen. Connexivum and venter black and densely covered with adpressed silvery pubescence, intermixed with erect hairs; dorsal segments shiny black; pleural margin of sternal segments III to V and VII, posterior margin of sixth sternite and seventh sternite shiny black, with erect hairs and with only the posterior margin of seventh sternite densely covered with silvery pubescence. *Pygophore.* Postero-ventral border rounded and entire. Total body length: 8.73.

Female. Head. Length: 1.20; width across eyes: 1.84; length antennal segments: I, 2.12; II, 1.00; III, 0.76; IV, 1.60. *Pronotum. Anterior lobe:* length: 0.76; width: 1.68. *Posterior lobe:* length: 1.20; width: 2.36. *Scutellum.* Length: 0.96; width: 0.88. Total body length: 10.22. Markings and coloration similar to male.

Holotype. Male. PERU: Satipo, 10. VIII. 1941. P. Paprzcki. Deposited in USNM. *Paratype.* One female with the same data. Deposited in USNM. One female PERU: TINGO MARIA: Rio Huallaga, VII. 1947, W. Weyrauch. Deposited in IBUNAM.

Discussion. This unique species can be distinguished by having a light creamy yellow corium with a longitudinal black band that runs almost throughout the corial disk and the ventral distribution of the silvery pubescence.

In *T. lurida* Distant, a closely related species, the humeral angle also has a small tooth, but in *lurida* the clavus and corium are entirely light orange-yellow.

Etymology. Named for its elongate black stripe of the corium.

TENTATIVE KEY FOR MOST OF THE KNOWN SPECIES OF *THERANEIS* SPINOLA*

1. Hemelytral membrane not reaching apex of abdomen

1'. Hemelytral membrane reaching or beyond apex of abdomen 2

2. Humeral angles of the pronotum provided with large and acute spine directed towards the back *T. spinosa* Distant

2'. Humeral angles of the pronotum without large and acute spine 3

3. Humeral angles of the pronotum with a small, obtuse apical tooth, directed towards the back 4

* *T. constricta* Stål, *T. isobel* Hussey and *T. ferruginea* Mayr are excluded.

3'. Humeral angles of the pronotum inermis 5

4. Clavus and corium orange or yellow *T. lurida* Distant

4'. Clavus black; corium creamy yellow with longitudinal median black stripe
..... *T. elongatus*, new species

5. Antennal segment II yellow 6

5'. Antennal segment II black 7

6. Clavus black *T. montivaga* Schmidt

6'. Clavus yellow or orange *T. pulchra* Distant

7. Pronotum black, densely silver pubescent, with the humeral angles red, or yellow, or
orange or creamy yellow 8

7'. Anterior lobe of the pronotum black and posterior lobe yellow or orange or with a
mixture of black and yellow or orange 13

8. Posterior margin of metathorax creamy yellow *T. neotropicalis*, new species

8'. Posterior margin of metathorax black 9

9. Clavus unicolorous, entirely pale orange or yellow 10

9'. Clavus bicolorous 11

10. Corium unicolorous, entirely yellow or orange *T. surinamensis* Van Doesburg

10'. Corium tricolored, with anterior half pale orange yellowish, followed by black and
irregular transverse fascia located below claval commissure and rest which includes
pale yellow apical margin and apical angle *T. multicoloratus*, new species

11. Corium yellow or orange and only with the internal angle below the claval suture
black *T. vaga* Schmidt

11'. Corium with another condition 12

12. Corium with three longitudinal bands, the external light orange, middle one yellow
and the internal black *T. vittata* Spinola

12'. Corium with two longitudinal bands, the external light orange and internal creamy
yellow, broken in the middle by a transversal, irregular black band
..... *T. araguaensis*, new species

13. Posterior lobe of the pronotum yellow or orange *T. oleosa* Distant

13'. Posterior lobe of the pronotum yellow, with large black spots on either side
..... *T. dissimilis* Distant

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